



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 86**

**[AMS-FRL-9623-8]**

### **Nonconformance Penalties for On-highway Heavy Heavy-Duty Diesel Engines**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Interim final rule.

**SUMMARY:** EPA is taking final action to make nonconformance penalties (NCPs) available to manufacturers of heavy heavy-duty diesel engines in model years 2012 and 2013 for emissions of oxides of nitrogen (NO<sub>x</sub>). In general, the availability of NCPs allows a manufacturer of heavy-duty engines (HDEs) whose engines fail to conform to specified applicable emission standards, but do not exceed a designated upper limit, to be issued a certificate of conformity upon payment of a monetary penalty to the United States Government. The upper limit associated with these NCPs is 0.50 grams of NO<sub>x</sub> per horsepower-hour.

**DATES:** This rule is effective [INSERT DATE OF PUBLICATION]. We will accept comments on this interim final rule until April 4, 2012.

#### **ADDRESSES:**

Submit your comments, to Docket EPA-HQ-OAR-2011-1000, by one of the following methods:

<http://www.regulations.gov>: Follow the on-line instructions for submitting comments.

E-mail: [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov).

Fax: EPA: (202) 566-9744.

Mail: EPA: Air Docket, Environmental Protection Agency, EPA Docket Center,

Mailcode: 2822T, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

Hand Delivery: EPA: EPA Docket Center, (Air Docket), U.S. Environmental Protection Agency, EPA West Building, 1301 Constitution Ave., NW., Room: 3334, Mail Code 2822T, Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2011-1000. See the SUPPLEMENTARY INFORMATION section on ``Public Participation" for additional instructions on submitting written comments.

Docket: All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy in the docket. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the following locations:

EPA: EPA Docket Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Air Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Chuck Moulis, U.S. EPA, National Vehicle and Fuel Emissions Laboratory, 2000 Traverwood, Ann Arbor MI 48105; Telephone (734) 214-4826; Email [moulis.charles@epa.gov](mailto:moulis.charles@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Regulated Entities**

This action affects you if you produce or import new heavy heavy-duty diesel engines which are intended for use in highway vehicles such as trucks and buses or heavy-duty highway vehicles. The table below gives some examples of entities that may be affected by these regulations. But because these are only examples, you should carefully examine the regulations in 40 CFR part 86. If you have questions, call the person listed in the **FOR FURTHER INFORMATION CONTACT** section above.

Category	NAICS <sup>a</sup> Codes	Examples of potentially regulated entities
Industry	336112 336120	Engine and truck manufacturers.

<sup>a</sup> North American Industry Classification System (NAICS).

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## **I. Statutory Authority and Regulatory Background**

### **A. Statutory Authority**

Section 206(g) of the Clean Air Act (the Act), 42 U.S.C. 7525(g), allows EPA to promulgate regulations permitting manufacturers of heavy-duty engines (HDEs) or heavy-duty vehicles (HDVs) to receive a certificate of conformity for HDEs or HDVs that exceed a federal emissions standard, but do not exceed an upper limit associated with that standard, if the manufacturer pays a nonconformance penalty (NCP) established by rulemaking. Congress adopted section 206(g) in the Clean Air Act Amendments of 1977 as a response to a concern with requiring technology-forcing emissions standards for

heavy-duty engines. The concern was if strict technology-forcing standards were promulgated, then some manufacturers might be unable to comply initially and would be forced out of the marketplace. NCPs were intended to remedy this concern. The nonconforming manufacturers would have a temporary alternative that would permit them to sell their engines or vehicles by payment of a penalty. At the same time, conforming manufacturers would not suffer a competitive disadvantage compared to nonconforming manufacturers, because the NCPs would be based, in part, on money saved by the nonconforming manufacturer.

Under section 206(g)(1), NCPs may be offered for HDVs or HDEs. The penalty may vary by pollutant and by class or category of vehicle or engine. Section 206(g)(3) requires that NCPs:

- Account for the degree of emission nonconformity;
- Increase periodically to provide incentive for nonconforming manufacturers to achieve the emission standards; and
- Remove the competitive disadvantage to conforming manufacturers.

Section 206(g) authorizes EPA to require testing of production vehicles or engines in order to determine the emission level upon which the penalty is based. If the emission level of a vehicle or engine exceeds an upper limit of nonconformity established by EPA through regulation, the vehicle or engine would not qualify for an NCP under section 206(g) and no certificate of conformity could be issued to the manufacturer. If the emission level is below the upper limit but above the standard, that emission level becomes the “compliance level,” which is also the benchmark for warranty and recall

liability. The manufacturer who elects to pay the NCP is liable for vehicles or engines that exceed the compliance level in use. The manufacturer does not have in-use warranty or recall liability for emissions levels above the standard but below the compliance level.

## **B. Background Regarding Nonconformance Penalty Rules**

Since the promulgation of the first NCP rule in 1985, subsequent NCP rules generally have been described as continuing “phases” of the initial NCP rule. The first NCP rule (Phase I), sometimes referred to as the “generic” NCP rule, established three basic criteria for determining the eligibility of emission standards for nonconformance penalties in any given model year (50 FR 35374, August 30, 1985). As described in section IV. A. (1) of this Interim Final Rule, we have determined that these criteria have been met for one manufacturer. (For regulatory language, see 40 CFR 86.1103-87.) The first criterion is that the emission standard in question must become more difficult to meet. This can occur in two ways, either by the emission standard itself becoming more stringent, or due to its interaction with another emission standard that has become more stringent. Second, substantial work must be required in order to meet the emission standard. EPA considers “substantial work” to mean the application of technology not previously used in that vehicle or engine class/subclass, or a significant modification of existing technology, in order to bring that vehicle/engine into compliance. EPA does not consider minor modifications or calibration changes to be classified as substantial work. Third, EPA must find that a manufacturer is likely to be noncomplying for technological reasons (referred to in earlier rules as a “technological laggard”). Prior NCP rules have

considered such a technological laggard to be a manufacturer who cannot meet a particular emission standard due to technological (not economic) difficulties and who, in the absence of NCPs, might be forced from the marketplace. As described in section IV. A. (1) of this Interim Final Rule, we have determined that this criterion has been met for one manufacturer. This manufacturer notified us late in 2011 that it would not have enough emission credits for its model year 2012 heavy heavy-duty engines.

The criteria and methodologies established in the 1985 NCP rule have since been used to determine eligibility and to establish NCPs for a number of heavy-duty emission standards. Phases II, III, IV, V, and VI published in the period from 1985 to 2002, established NCPs that, in combination, cover the full range of heavy-duty - from heavy light-duty trucks (6,000-8,500 pounds gross vehicle weight) to the largest diesel truck and urban bus engines. NCPs have been established for hydrocarbons (HC), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and particulate matter (PM). The most recent NCP rule (67 FR 51464, August 8, 2002) established NCPs for the 2004 and later model year NO<sub>x</sub> standard for heavy-duty diesel engines (HDDEs). The NCP rulemaking phases are summarized in greater detail in the Interim and Proposed Technical Support Document for this rulemaking.

## **C. 2007 and 2010 NO<sub>x</sub> Standards**

The 0.20 g/hp-hr NO<sub>x</sub> standard that applies for current and future heavy-duty



engines was adopted January 18, 2001 (66 FR 5001), and first applied in the 2007 model year. However, because of phase-in provisions adopted in that rule and use of emission credits generated by manufacturers for early compliance, manufacturers have been able to continue to produce engines with NOx emissions greater than 0.20 g/hp-hr. The phase-in provisions ended after model year 2009 so that the 0.20 g/hp-hr NOx standard was fully phased-in for model year 2010. Equally important, the cap applicable to Family Emission Limits (FELs)<sup>1</sup> for credit using engine families was lowered to 0.50 g/hp-hr beginning in model year 2010. Because of these changes that occurred in model year 2010, the 0.20 g/hp-hr NOx emission standard is often referred to as the 2010 NOx emission standard, even though it applied to engines as early as model year 2007.

While some manufacturers retain NOx emission credits that currently allow them to produce engines with NOx emissions as high as 0.50 g/hp-hr, we expect that one of these manufacturers could exhaust its supply of heavy heavy-duty engine NOx credits as early as this year.

## **II. Justification for This Interim Final Rule**

EPA is taking this action as an interim final rule without prior proposal and public comment because EPA finds for good cause under section 553(b)(B) of the

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<sup>1</sup> FELs are emission levels specified by the manufacturer that serve as the applicable emission standard for engines participating in the emission averaging program. The FEL cap is the highest FEL to which a manufacturer may certify an engine using emission credits.

Administrative Procedure Act (APA), 5 U.S.C. 551 et seq. that notice-and-comment are impracticable, unnecessary or contrary to the public interest in this instance. Section 307(d) of the CAA states that in the case of any rule to which section 307(d) applies, notice of proposed rulemaking must be published in the Federal Register (CAA § 307(d)(3)). The promulgation or revision of regulations under section 206 of the CAA is generally subject to section 307(d). However, section 307(d) does not apply to any rule referred to in subparagraphs (A) or (B) of section 553(b) of the APA.

In reaching this determination, EPA considered several factors: (1) Taking interim final action avoids the possibility of an engine manufacturer from being unable to certify a complete product line of engines for model year 2012 and/or 2013; (2) the Agency is only amending limited provisions in existing NCP regulations in 40 CFR part 86; (3) the rule's duration is limited (see, e.g., *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506 (DC Cir. 1983)); and (4) there is no risk to the public interest in allowing manufacturers to certify using NCPs before the point at which EPA could make them available through a full notice-and-comment rulemaking.

EPA is promulgating NCPs for heavy heavy-duty diesel engines in this Interim Final Rule because we have concluded that there is a significant likelihood that they will be needed during the 2012 model year. One manufacturer is currently using NO<sub>x</sub> credits to certify all of its heavy heavy-duty diesel engines at nearly 0.50 g/hp-hr. Based on its current credit balance and projected sales for this service class, we do not expect this manufacturer to have sufficient credits to cover its entire model year 2012 production. Since we have not certified any of this manufacturer's model year 2012 heavy heavy-

duty diesel engines without the need for emission credits, we believe it is possible that it may need NCPs during this model year. We have concluded that the very earliest we could make NCPs available through a full notice-and-comment rulemaking, would be late in model year 2012, which would likely be after the manufacturer's credit supply has been depleted. Thus, making NCPs available through this Interim Final Rule is the only way to ensure that the manufacturer's depletion of its NOx credits will not force it to cease production of heavy heavy-duty engines this year.

The second reason for invoking the good cause exemption is that EPA is establishing NCPs based on the existing regulatory provisions in 40 CFR part 86, subpart L, and is only adding new penalty parameters to reflect the costs of compliance specific to the 2010 NOx standard. In this Interim Final Rule, EPA is not revisiting the regulatory provisions that specify how to calculate penalties from the penalty parameters, how to determine a compliance level, or how to report to EPA. Since these provisions have been established through notice-and-comment rulemaking several times before, interested parties have had opportunity to comment on them. Thus, it is unnecessary to provide an additional opportunity to comment prior to issuing this interim final rule.

Third, at most, this interim final rule will address only heavy heavy-duty engines in model years 2012 and 2013, and by its own terms is applicable for less than two calendar years. It is thus limited in duration. EPA is publishing a parallel notice of proposed rulemaking simultaneously with this rule and EPA intends to take appropriate final action on that rule as soon as possible. With due consideration to comments, the

interim NCPs being established in this IFR will cease to be applicable once the follow up Final Rule is effective.

Finally, it is important to note that NCPs are set at a level that is intended to ensure that manufacturers only use them when there is no other path to certification. Thus, should EPA be incorrect in its projection that NCPs will be needed during model year 2012, the fact that they will be available on an interim basis will have no practical significance because manufacturers will not use them.

For the reasons explained above, EPA finds that this constitutes good cause under 5 U.S.C. 553(b)(B). Nonetheless, EPA is providing until April 4, 2012 for submission of public comments following this action. EPA will consider all written comments submitted in the allotted time period in the context of the accompanying notice of proposed rulemaking.

Section 553(d) of the Administrative Procedure Act (APA), 5 U.S.C. chapter 5, generally provides that rules may not take effect earlier than 30 days after they are published in the Federal Register. APA section 553(d) excepts from this provision any action that grants or recognizes an exemption or relieves a restriction. Since today's action can be considered to either effectively grant an exemption from meeting the current applicable NOx emission standard or relieve a restriction that would otherwise prevent a manufacturer from certifying, EPA is making this action effective immediately upon publication.

### **III. Notice of Proposed Rulemaking**

EPA is also simultaneously publishing a parallel Notice of Proposed Rulemaking (NPRM) addressing NCPs for heavy-duty engines. Among other things, that NPRM seeks comment on NCPs for model year 2012 and later heavy heavy-duty diesel engines, as well as for medium heavy-duty diesel engines. The NCPs in the Final Rule for that NPRM will eventually supersede the NCPs being promulgated in this Interim Final Rule, especially for model year 2013 and later. For example, should the follow-up Final Rule be published by September 14, 2012, it would likely have an effective date of November 13, 2012. Should that Final Rule establish different NCPs for heavy heavy-duty engines, those new NCPs would be available for any engines produced on or after November 13, 2012, instead of the interim NCPs being finalized today.

Note that Docket Number EPA–HQ–OAR–2011–1000 is being used for both the Interim Final Rule and the parallel NPRM.

### **IV. Nonconformance Penalties for 2012 and Later Heavy-Duty Engines and Heavy-Duty Vehicles**

## **A. NCP Eligibility: Emission Standards for Which NCPs are Being Established in this Interim Final Rule**

### **(1) Heavy Heavy-Duty Diesel NOx Standard**

As discussed in section I.B., EPA must determine that three criteria are met in order to determine that an NCP should be established in any given model year. For the 2010 NOx standard, we believe these criteria have been met for heavy heavy-duty diesel engines, and it is therefore appropriate to establish NCPs for this standard for the current model year and later.

The first criterion requires that the emission standard in question must become more difficult to meet. This is the case with the 2010 NOx standard. The previous emission standard for this category is a combined NMHC + NOx standard of 2.4 g/hp-hr, or optionally a 2.5 g/hp-hr NMHC + NOx with a limit of 0.5 g/hp-hr NMHC.<sup>2</sup> The 2010 (i.e., current) standards are 0.20 g/hp-hr for NOx and 0.14 g/hp-hr for NMHC. When promulgated, the Agency concluded that the 0.20 g/hp-hr NOx standard was a technology forcing standard. Second, all heavy heavy-duty diesel engines currently certified to the 0.20 g/hp-hr standard without using credits are using new aftertreatment systems to meet

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<sup>2</sup> NMHC stands for non-methane hydrocarbons, which is a measure of total hydrocarbons with the methane emissions subtracted out. For typical on-highway diesel fueled heavy-duty engines, methane emissions are on the order of 10 percent of the total hydrocarbon emissions.

this standard.<sup>3</sup> It is therefore logical to conclude the standard is more difficult to meet and that substantial work was required to meet the emission standard.

Third, EPA is promulgating NCPs for heavy heavy-duty diesel engines because we have concluded that there is a significant likelihood that they will be needed by an engine manufacturer that has not yet met the requirements for technological reasons. One manufacturer is currently using NOx credits to certify all of its heavy heavy-duty diesel engines at nearly the FEL cap level of 0.50 g/hp-hr. Based on its current credit balance and projected sales for this service class, we do not expect this manufacturer to have sufficient credits to cover its entire model year 2012 production. This manufacturer intends to use a different technology to meet the NOx standard but has not yet submitted an application for the 2012 model year with NOx emissions at or below the 0.20 g/hp-hr standard. Since it has not yet submitted an application for certification for any model year 2012 heavy heavy-duty diesel engines that would not require emission credits, we believe it is a reasonable possibility that this manufacturer may not be able to comply for technological reasons with respect to the 2010 NOx standards for heavy heavy-duty diesel engines in the 2012 and 2013 model years. This manufacturer notified us late in 2011 that it would not have enough emission credits for its model year 2012 heavy heavy-duty engines.

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<sup>3</sup> For this notice, EPA describes those manufacturers that have achieved the 0.20 g/hp-hr emission standard as “conforming”, “compliant” or “complying” manufacturers, and those that have not as the “nonconforming”, “noncompliant” or “noncomplying” manufacturers. However, it is important to clarify that manufacturers certifying above the 0.20 g/hp-hr NOx emission standard using emission credits are in compliance with regulations as long as they have enough emission credits to offset their total NOx emissions above the standard.

## **B. NCP Eligibility: Emission Standards for Which We are Not Establishing NCPs in this Interim Final Rule**

This section identifies the emission standards for which we are not establishing NCPs in this Interim Final Rule. Note that EPA is issuing a parallel Notice of Proposed Rulemaking (NPRM) proposing and/or seeking comment on NCPs for certain other emission standards.

### **(1) Light and Medium Heavy-Duty Diesel NO<sub>x</sub> Standards**

EPA believes that the first two NCP criteria have been met for the 2010 NO<sub>x</sub> standard for light and medium heavy-duty diesel engines. However, we have not determined that any manufacturer of light or medium heavy-duty diesel engines will be unable to certify to the 2010 NO<sub>x</sub> standard for the 2012 and 2013 model years. We believe that any manufacturer unable to achieve 0.20 g/hp-hr will have sufficient NO<sub>x</sub> emission credits to continue certifying light heavy-duty and medium heavy-duty engines through the 2013 model year. (See the parallel NPRM.)

### **(2) Heavy-Duty Gasoline Engine Standards**

In a final rule published on January 18, 2001 (66 FR 5001), EPA established more stringent emission standards for all heavy-duty gasoline (or “Otto-cycle”) vehicles and



engines. These standards took two forms: a chassis-based set of standards for complete vehicles under 14,000 pounds GVWR (the chassis-based program), and an engine-based set of standards for all other Otto-cycle heavy-duty engines (the engine-based program). Each of the two programs has an associated averaging, banking, and trading (ABT) program. The new standards generally took effect starting with the 2008 model year, and all manufacturers are in compliance with them.

### **(3) Heavy-duty Diesel Engine NMHC, CO, and PM Standards**

EPA adopted new NMHC and PM for model year 2007 and later heavy-duty engines in the same rule that set the 2010 NO<sub>x</sub> emission standard (66 FR 5001, January 18, 2001). The CO standard was not changed. We are not considering NCPs for any of these other standards because all manufacturers are already fully compliant with them.

### **(4) Heavy-duty CO<sub>2</sub> Standards**

In a final rule published on September 15, 2011 (76 FR 57106), EPA established new CO<sub>2</sub> emission standards for all heavy-duty vehicles and engines. We are not considering NCPs for any of these standards at this time because we currently do not have a basis to conclude that a technological laggard is likely to develop.

We are adding a new regulatory provision related to these CO<sub>2</sub> emission standards. The provision prohibits generating CO<sub>2</sub> emission credits from engines paying

NCPs for NO<sub>x</sub>. Given the general tradeoff between CO<sub>2</sub> and NO<sub>x</sub> emissions, we were concerned that a manufacturer capable of meeting the 0.20 g/hp-hr NO<sub>x</sub> emission standard could choose to pay an NCP in order to generate CO<sub>2</sub> credits by recalibrating its engines for higher NO<sub>x</sub> emissions and lower CO<sub>2</sub>. There are two reasons this would be inappropriate. First, emission credits are supposed to provide an incentive for a manufacturer to go beyond what is normally required to meet emission standards. However, allowing manufacturers to generate CO<sub>2</sub> credits while paying NCPs would actually create an incentive for manufacturers to do less than is required to meet the emission standards. Equally important, NCPs have always been intended for manufacturers that cannot meet an emission standard for technological reasons rather than manufacturers choosing not to comply.

## **V. Penalty Rates**

This rulemaking is the most recent in a series of NCP rulemakings. These are referred to as Phases and are referenced below.<sup>4</sup> The discussions of penalty rates in those rulemakings are incorporated by reference. This section briefly reviews the penalty rate formula originally promulgated in the Phase I rule (currently found at 40 CFR 86.1113-87) and discusses how EPA arrived at the penalty rates in this Interim Final Rule.

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<sup>4</sup> The previous NCP rules include: the Phase VI rulemaking (67 FR 51464, August 8, 2002), Phase IV rulemaking (58 FR 68532, December 28, 1993), Phase III rulemaking (55 FR 46622, November 5, 1990), the Phase II rulemaking (50 FR 53454, December 31, 1985) as well as the Phase I rulemaking (50 FR 35374, August 30, 1985).

The penalty rates being established in this rule rely on the existing NCP regulatory structure. Thus, the only changes being made to the regulations are updates to the cost parameters to reflect the compliance costs for the 2010 standards, setting of the upper limit, and clarifying in §86.1104-91 that EPA may set the upper limit at a level below the previous standard if we determine that the lower level is achievable by all engines.

Because these penalties are being adopted in an Interim Final Rule, we are limiting their applicability to model years 2012 and 2013. Prior to model year 2014, we will promulgate a Final Rule addressing NCPs following notice and comment. Note that we may promulgate the Final Rule as soon as later this calendar year, and as applicable, it would supersede the provisions of this Interim Final Rule after it becomes effective.

The NCP rates being adopted in this IFR are specified for model year 2012. As required by the Clean Air Act, the existing regulations include a formula that increases the penalty rates with each new model year. We will apply this annual adjustment formula to the NCPs by setting the 2012 model year as year number one. Traditionally, NCPs are available the first year of the new emission standard and that becomes year one for purposes of the annual escalator. However, EPA believes the 2012 model year is the correct year for the first year of the escalator calculation even though the NO<sub>x</sub> emission standard began in 2010.

## A. Parameters

As in the previous NCP rules, we are specifying the NCP formula for each standard using the following parameters:  $COC_{50}$ ,  $COC_{90}$ ,  $MC_{50}$ ,  $F$ , and  $UL$ . The NCP formula is the same as that promulgated in the Phase I rule. As was done in previous NCP rules, costs consider additional manufacturer costs and additional owner costs, but do not consider certification costs because both complying and noncomplying manufacturers must incur certification costs.  $COC_{50}$  is an estimate of the industry-wide average incremental cost per engine (references to engines are intended to include vehicles as well) associated with meeting the standard for which an NCP is offered, compared with meeting the upper limit.  $COC_{90}$  is an estimate of the 90th percentile incremental cost per-engine associated with meeting the standard for which an NCP is offered, compared with meeting the associated upper limit. Conceptually,  $COC_{50}$  represents costs for a typical or average manufacturer, while  $COC_{90}$  represents costs for the manufacturers with the highest compliance costs.

$MC_{50}$  is an estimate of the industry-wide average marginal cost of compliance per unit of reduced pollutant associated with the least cost effective emission control technology installed to meet the new standard.  $MC_{50}$  is measured in dollars per g/hp-hr for heavy-duty engines.  $F$  is a factor used to derive  $MC_{90}$ , the 90th percentile marginal cost of compliance with the NCP standard for engines in the NCP category.  $MC_{90}$  defines the slope of the penalty rate curve near the standard and is equal to  $MC_{50}$  multiplied by  $F$ .  $UL$  is the upper limit above which no engine may be certified.

The derivation of the cost parameters is described in a support document entitled “Interim and Proposed Technical Support Document: Nonconformance Penalties for 2012 and later Highway Heavy-Duty Diesel Engines,” which is available in the public docket for this rulemaking. All costs are presented in 2011 dollars.

### **(1) Upper Limit**

We are revising the regulations in §86.1104-91 to clarify that EPA may set (during rulemaking) the upper limit at a level below the previous standard if we determine that the lower level is achievable by all engines. As described below, we are also establishing the upper limit for this NCP rule at 0.50 g/hp-hr. These are the only regulatory changes being made with respect to the upper limit.

The upper limit is the emission level established by regulation above which NCPs are not available and a heavy duty engine cannot be certified or introduced into commerce. CAA section 206(g)(2) refers to the upper limit as a percentage above the emission standard, set by regulation, that corresponds to an emission level EPA determines to be “practicable.” The upper limit is an important aspect of the NCP regulations not only because it establishes an emission level above which no engine may be certified, but it is also a critical component of the cost analysis used to develop the penalty rates. The regulations specify that the relevant costs for determining the COC<sub>50</sub>

and the COC<sub>90</sub> factors are the difference between an engine at the upper limit and one that meets the applicable standards (see 40 CFR 86.1113-87).

The regulatory approach adopted under the prior NCP rules sets the default Upper Limit (UL) at the prior emission standard when a prior emission standard exists and is then changed to become more stringent. EPA concluded that the upper limit should be reasonably achievable by all manufacturers with vehicles in the relevant class. It should be within reach of all manufacturers of HDEs or HDVs that are currently allowed so that they can, if they choose, pay NCPs and continue to sell their engines and vehicles while finishing their development of fully complying engines. A manufacturer of a previously certified engine or vehicle should not be forced to immediately remove an HDE or HDV from the market when an emission standard becomes more stringent. The prior emissions standard generally meets these goals because manufactures have already certified their vehicles to that standard.

In the past, EPA has rejected suggestions that the upper limit should be more stringent than the prior emission standard because it would be very difficult to identify a limit that could be met by all manufacturers. For this rule, however, all manufacturers are currently certifying all of their engines at or below the 0.50 g/hp-hr FEL cap. Thus, since NCPs were not intended to allow manufacturers to increase emissions, we are setting the upper limit for this NCP rule at 0.50 g/hp-hr NO<sub>x</sub>. This will conform to the purpose of NCPs, which is to allow manufacturers to continue selling engines they are producing, but not to allow backsliding.

## **(2) Cost Parameter Values**

The regulations being adopted specify that the values in Table 1 (in 2011 dollars) be used in the NCP formula for the 2012 and later model year NO<sub>x</sub> standard of 0.20 g/hp-hr for diesel heavy heavy-duty engines. The basis is summarized here. The complete derivation of these parameters is described in the Interim Technical Support Document for this rulemaking.

We also considered other methodologies for estimating the incremental compliance costs between the upper limit and the standard. We rejected these alternatives because we are not confident that we could estimate the costs with sufficient accuracy or describe our basis without revealing confidential business information. Moreover, we have no reason to believe that these alternative methodologies would have been better with respect to the statutory requirement to remove the competitive disadvantage of the complying manufacturers.

### *(a) General Methodology*

Based on our review of the various hypothetical baseline engine designs, we selected a straightforward “baseline engine” technology package with associated costs that were determinable within a reasonably high degree of certainty. This approach best limited the sensitivity of the penalty rate versus small variations in any of the “baseline

engine” technology package elements. This cost stability mitigated the hypothetical nature of the “baseline engine” technology package, which, in turn, led to a penalty rate that we believe is reasonable. As is described in the TSD, we believe estimating costs by this approach is the least speculative method to determine compliance costs.

We selected a baseline engine technology package that would employ the same basic emission controls used to meet the 2007 NO<sub>x</sub> and PM emission standards (e.g. cooled exhaust gas recirculation), optimized turbo-charging, optimized fuel injection, diesel particulate filters), plus liquid urea based Selective Catalytic Reduction (SCR) NO<sub>x</sub> emissions control technology with an appropriately sized tank for the diesel exhaust fluid (DEF). Further details are provided in this rule’s TSD. While EPA selected the baseline engine (or upper limit engine) to be a fully optimized, SCR-equipped engine that complies with all other emission standards and requirements, the NCPs may be used for engines using other technologies.

This approach differs slightly from that used in previous NCP rules, where EPA based the NCPs directly on an average of actual compliance costs for all manufacturers. This was appropriate in those prior rules because each of the manufacturers had actually produced engines at the upper limit (which was usually the previous emission standard). It was relatively straightforward for them to provide us with a confidential engineering analysis of the costs they actually incurred: the real costs of additional hardware and fluids and the differences in performance characteristics. We have always sought full understanding of the manufacturers’ inputs, and for previous NCP rules it was also reasonable for EPA to conclude that the manufacturers’ input accurately reflected the



manufacturers' actual costs because the costs were derived directly from actual in-production engine information. In the case of this NCP rule, however, compliant manufacturers have not designed and optimized in-production engines for the U.S. market at 0.50 g/hp-hr NO<sub>x</sub> (the upper limit). Thus, a compliance cost estimate based directly on actual experience for in-production engines was not available for this NCP rule.

Instead of averaging actual costs (because none were available), the NCP penalty formulas for this rule are based primarily on EPA's estimate of the cost difference between an engine emitting at the upper limit (the "baseline engine") and one emitting at the standard (the "compliant engine"). We requested cost of compliance information from several engine manufacturers and used that information to inform our own analysis of compliance costs, as described in the Interim and Proposed Technical Support Document. The engine manufacturers we contacted approached this cost analysis in the same way we did. That is, the scenarios we and the manufacturers considered were all based upon hypothetical baseline engine designs that were intended to meet the 0.50 g/hp-hr NO<sub>x</sub> upper limit.

It is worth noting that each of the five engine manufacturers we contacted considered hypothetical baseline engines with different technology packages. Two complying manufacturers based their compliance costs on a baseline engine equipped with similar (but not identical) hardware as EPA; another on an SCR-equipped engine without exhaust gas recirculation, and a fourth on its estimation of the non-complying engines produced by a competitor. All four manufacturers meeting the 0.20 g/hp-hr NO<sub>x</sub> standard compared the costs for their hypothetical baseline engines to the costs for their

actual compliant engines. The one non-SCR manufacturer we contacted (that has not yet certified any engines with NOx emissions at 0.20 g/hp-hr) provided its projections of what it will spend to bring its current 2011 engine into compliance without the use of emission credits.

*(b) Calculated Values*

The most significant of the NCP parameters is the 90<sup>th</sup> percentile costs of compliance, COC<sub>90</sub>, which defines the penalty for engines emitting at the upper limit. The value of COC<sub>50</sub> only matters when EPA estimates that marginal compliance costs change as the compliance level approaches the standard. In such cases, COC<sub>50</sub> defines that point on the curve at which the slope changes. We estimated COC<sub>90</sub> and COC<sub>50</sub> by assuming the baseline engine would have been an SCR equipped engine with NOx emissions at 0.50 g/hp-hr and that it looked very similar to an engine with NOx emissions at 0.20 g/hp-hr. However, the higher NOx emissions of the baseline engine would allow the use of less expensive hardware and would require less consumption of liquid urea (also known as diesel emission fluid or “DEF”).

We estimated the marginal costs of compliance as being equal to the total incremental costs of compliance divided by 0.30 g/hp-hr (the difference between the upper limit and the standard). This assumes that the cost to reduce emissions from 0.30 g/hp-hr to 0.20 g/hp-hr is not significantly different from the cost to reduce emissions from 0.50 g/hp-hr to 0.40 g/hp-hr. This results in a penalty curve that is a straight line, which in turn makes our estimate of the average cost of compliance irrelevant to the calculation of the penalty. In other words, the COC<sub>50</sub> point lies directly between zero

cost at 0.20 g/hp-hr and COC<sub>90</sub> at the Upper Limit of 0.50 g/hp-hr NO<sub>x</sub>. The penalty paid for engines at the upper limit would be equal to EPA's estimate of the highest marginal cost paid by a complying manufacturer for the same emission range.

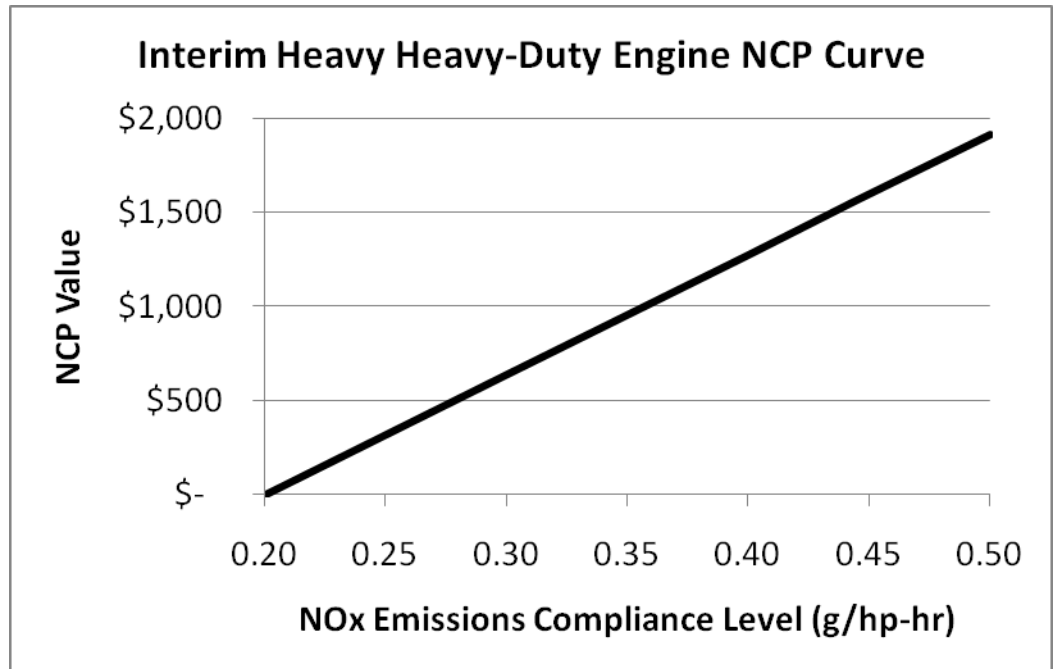
**Table 1: Interim NCP Calculation Parameters**

Parameter	Heavy Heavy-Duty Diesel Engines
COC <sub>50</sub>	\$1,561
COC <sub>90</sub>	\$1,919
MC <sub>50</sub>	\$5,203 per gram per horsepower-hour
F	1.23
UL	0.50 g/hp-hr

### **(3) Resulting Penalties**

The calculation parameters listed in Table 1 are used to calculate the penalty rate. These parameters are used in the penalty rate formulas which are defined in the existing NCP regulations (See 40 CFR 86.1113(a)(1) and (2)). Using the parameters in Table 1, and the equations in the existing NCP regulations, we have plotted penalty rates versus compliance levels in Figure 1 below. This penalty curve is for the first year of use of the NCPs (i.e., the annual adjustment factors specified in the existing NCP regulations have been set equal to one).

**Figure 1**



The Clean Air Act NCP provisions require that the penalty be set at such a level that it removes any competitive disadvantage a complying manufacturer by requiring non-complying manufacturers to pay NCPs. Our methodology for developing the NCP is detailed in the Interim and Proposed Technical Support Document. Our technology approach includes relatively minor hardware upgrades, calibration changes, and increased use of DEF. For the reasons described in the Interim and Proposed Technical Support Document, we believe that the NCPs being established in this rulemaking will remove any competitive disadvantage that complying manufacturers may face.

## **VI. Economic Impact**

Because the use of NCPs is optional, manufacturers have the flexibility and will likely choose whether or not to use NCPs based on their ability to comply with emissions standards. If no manufacturer elects to use NCPs, these manufacturers and the users of their products will not incur any additional costs related to NCPs. NCPs remedy the potential problem of having a manufacturer forced out of the marketplace due to that manufacturer's inability to conform to new, strict emission standards in a timely manner. Without NCPs, a manufacturer which has difficulty certifying HDEs in conformance with emission standards or whose engines fail a Selective Enforcement Audit (SEA) has only two alternatives: fix the nonconforming engines, perhaps at a prohibitive cost, or prevent their introduction into commerce. The availability of NCPs provides manufacturers with a third alternative: continue production and introduce into commerce upon payment of a penalty an engine that exceeds the standard until an emission conformance technique is developed. Therefore, NCPs represent a regulatory mechanism that allows affected manufacturers to have increased flexibility. A decision to use NCPs may be a manufacturer's only way to continue to introduce its products into commerce.

## **VII. Environmental Impact**

When evaluating the environmental impact of this rule, one must keep in mind that, under the Act, NCPs are a consequence of enacting new, more stringent emissions

requirements for heavy duty engines. Emission standards are set at a level that most, but not necessarily all, manufacturers can achieve by the model year in which the standard becomes effective. Following *International Harvester v. Ruckelshaus*, 478 F. 2d 615 (D.C. Cir. 1973), Congress realized the dilemma that technology-forcing standards could potentially cause, and allowed manufacturers of heavy-duty engines to certify nonconforming vehicles/engines upon the payment of an NCP, under certain terms and conditions. This mechanism was intended to allow manufacturer(s) who cannot meet technology-forcing standards immediately to continue to manufacture nonconforming engines while they tackle the technological problems associated with meeting new emission standard(s). Thus, as part of the statutory structure to force technological improvements without driving manufacturers or individual engine models out of the market, NCPs provide a flexibility that fosters long-term emissions improvement through the setting of lower emission standards at an earlier date than could otherwise be feasible. Because NCPs are designed to increase with time, manufacturers using NCPs are likely to reduce emission levels to meet the standard as quickly as possible, which minimizes the environmental impact.

As is always the case with NCPs, the potential exists for there to be more extensive use of NCPs beyond what may be expected to be used by the manufacturer that we believe will need them. For example, depending upon the penalty rate and other factors, some otherwise fully compliant manufacturers could elect to pay the NCP in order to reconfigure their 0.20 g/hp-hr NO<sub>x</sub> compliant engines to emit up to 0.50 g/hp-hr so that they can re-optimize engine hardware and vehicle operating costs. This potential action is not without R&D and other financial costs to the manufacturer and thus is not a

decision which would be taken lightly, given the short-term nature of the NCPs allowed for in this interim final rule. Furthermore, we believe that any such impacts would be short-term and self-limiting in nature because the NCP annual adjustment factor, established via prior NCP rules, increases the levels of the penalties over time and based on the extent of the use of NCPs by all manufacturers. In other words the NCP program is structured such that the incentives to produce engines that meet the standard increase year-by-year and increase upon NCP use. The practical impact of this adjustment factor is that the NCPs will rapidly become an undesirable option for all manufacturers that may elect to use them. However, while we expect their use to be limited, we have no way of predicting at this time how many manufacturers will make use of the NCPs, or how many engine families would be subject to the NCP program. Because of these uncertainties we are unable to accurately quantify the potential impact the NCPs might have on emission inventories, although, as stated above, any impacts are expected to be short-term and self-limiting in nature.

## **VIII. Public Participation**

We are opening a formal comment period by publishing this document. We will accept comments for the period indicated under DATES above. If you have an interest in the program described in this document, we encourage you to comment on any aspect of this rulemaking.

Your comments will be most useful if you include appropriate and detailed supporting rationale, data, and analysis. If you disagree with parts of the interim program,

we encourage you to suggest and analyze alternate approaches to meeting the goals described in this Interim Final Rule. You should send all comments, except those containing proprietary information, to our Air Docket (see ADDRESSES) before the end of the comment period.

If you submit proprietary information for our consideration, you should clearly separate it from other comments by labeling it “Confidential Business Information.” You should also send it directly to the contact person listed under FOR FURTHER INFORMATION CONTACT instead of the public docket. This will help ensure that no one inadvertently places proprietary information in the docket. We will disclose information covered by a claim of confidentiality only through the application of procedures described in 40 CFR part 2. If you do not identify information as confidential when we receive it, we may make it available to the public without notifying you.

## **IX. Statutory and Executive Order Reviews**

### **A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review**

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011).



## **B. Paperwork Reduction Act**

This action does not impose any new information collection burden. It only updates the penalty amounts to correspond to the current emission standards. However, the Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations 40 CFR part 86, subpart L under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2060-0132. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

## **C. Regulatory Flexibility Act**

### **(1) Overview**

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of these rules on small entities, small entity is defined as: (1) a small business as defined by SBA regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school

district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

## **(2) Summary of Potentially Affected Small Entities**

After considering the economic impacts of this rule on small entities, I certify that this action will not have a significant impact on a substantial number of small entities.

When these emission standards were established, the final rulemaking (66 FR 5001, January 18, 2001) noted that we were not aware of “any manufacturers of heavy-duty engines that meet SBA’s definition of a small business.” Based on an updated assessment, EPA has identified a total of about 14 manufacturers that produce diesel cycle heavy-duty motor vehicle engines. Of these, none of these are small businesses that are producing engines with NO<sub>x</sub> emissions above 0.20 g/hp-hr. Based on this, we are certifying that this rule will not have a significant economic impact on a substantial number of small entities.

## **(3) Conclusions**

I therefore certify that this Interim Final Rule will not have a significant economic impact on a substantial number of small entities.

## **D. Unfunded Mandates Reform Act**

This rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the

private sector in any one year. The agency has determined that this action does not contain a Federal mandate that may result in expenditures of \$100 million or more for the private sector in any one year. Because the use of NCPs is optional, manufacturers have the flexibility and will likely choose whether or not to use NCPs based on their ability to comply with emissions standards. The availability of NCPs provides manufacturers with a third alternative: to continue production and introduce into commerce upon payment of a penalty an engine that exceeds the standard until an emission conformance technique is developed. Therefore, NCPs represent a regulatory mechanism that allows affected manufacturers to have increased flexibility. Thus, this action is not subject to the requirements of sections 202 or 205 of the UMRA. This action is also not subject to the requirements of section 203 of the UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

#### **E. Executive Order 13132 (Federalism)**

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of

government, as specified in Executive Order 13132. These rules will apply to manufacturers of on-highway engines and not to state or local governments. Thus, Executive Order 13132 does not apply to this action.

#### **F. Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments)**

This IFR does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This rule will be implemented at the Federal level and impose compliance costs only on engine manufacturers who elect to use the NCP regulatory flexibility to comply with emissions standards. Tribal governments would be affected only to the extent they purchase and use engines and vehicles to which an NCP has been applied. Thus, Executive Order 13175 does not apply to this rule.

#### **G. Executive Order 13045: “Protection of Children from Environmental Health Risks and Safety Risks”**

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62FR19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the agency must evaluate the environmental health or safety effects of the planned rule on

children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the agency.

EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045 because it does not establish an environmental standard intended to mitigate health or safety risks.

## **H. Executive Order 13211 (Energy Effects)**

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

## **I. National Technology Transfer Advancement Act**

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs the agencies to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials, specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the EPA decides not to use available and applicable voluntary consensus standards.

This rule does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

## **J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations**

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this action will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations. The overall environmental impacts of this action are expected to be small and of limited duration. Moreover, there is no reason to believe that trucks using NCP engines will be more likely to operate near any minority or low-income populations than other trucks.

## **K. Congressional Review Act**

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the

public interest. This determination must be supported by a brief statement. 5 U.S.C. 808(2). As stated previously in Section II above, EPA has made such a good cause finding, including the reasons therefore, and established an effective date of [INSERT DATE OF PUBLICATION]. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

## **X. Statutory Provisions and Legal Authority**

Statutory authority for the vehicle controls in these rules is found in CAA section 206(g), of the CAA, 42 U.S.C. 7525(g).

### **List of Subjects in 40 CFR Part 86**

Administrative practice and procedure, Confidential business information, Motor vehicle pollution, Reporting and recordkeeping requirements.

Dated: January 20, 2012.

Lisa P. Jackson,  
Administrator.

For the reasons set forth in the preamble, the Environmental Protection Agency is amending 40 CFR chapter I of the Code of Federal Regulations as follows:

**PART 86-- CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY  
VEHICLES AND ENGINES**

1. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

**Subpart L—[Amended]**

2. Section 86.1104-91 is revised to read as follows:

**§ 86.1104-91 Determination of upper limits.**

EPA shall set a separate upper limit for each phase of NCPs and for each service class.

(a) The provisions of this section specify a default approach for determining the upper limit values.

(1) The default upper limit applicable to a pollutant emission standard for a subclass of heavy-duty engines or heavy-duty vehicles for which an NCP is established in accordance with §86.1103–87, shall be the previous pollutant emission standard for that subclass.

(2) If a manufacturer participates in any of the emissions averaging, trading, or banking programs, and carries over certification of an engine family from the prior model year, the upper limit for that engine family shall be the family emission limit of the prior model year, unless the family emission limit is less than the upper limit determined in paragraph (a) of this section.



(b) If no previous standard existed for the pollutant under paragraph (a) of this section, the upper limit will be developed by EPA during rulemaking.

(c) EPA may set the upper limit during rulemaking at a level below the default level specified in paragraph (a) of this section if we determine that a lower level is achievable by all engines.

3. Section 86.1105-87 is amended by revising paragraph (e) and adding paragraph (j) to read as follows:

**§ 86.1105-87 Emission standards for which nonconformance penalties are available.**

\* \* \* \* \*

(e) The values of COC50, COC90, and MC50 in paragraphs (a) and (b) of this section are expressed in December 1984 dollars. The values of COC50, COC90, and MC50 in paragraphs (c) and (d) of this section are expressed in December 1989 dollars. The values of COC50, COC90, and MC50 in paragraph (f) of this section are expressed in December 1991 dollars. The values of COC50, COC90, and MC50 in paragraphs (g) and (h) of this section are expressed in December 1994 dollars. The values of COC50, COC90, and MC50 in paragraph (i) of this section are expressed in December 2001 dollars. The values of COC50, COC90, and MC50 in paragraph (j) of this section are expressed in December 2011 dollars. These values shall be adjusted for inflation to dollars as of January of the calendar year preceding the model year in which the NCP is first available by using the change in the overall Consumer Price Index, and rounded to the nearest

whole dollar in accordance with ASTM E29–67 (reapproved 1980), Standard Recommended Practice for Indicating Which Places of Figures are to be Considered Significant in Specified Limiting Values. This method was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This document is available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428–2959, and is also available for inspection as part of Docket A–91–06, located at the U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave., NW., Room 3334, EPA West Building, Washington, DC 20004, (202) 202–1744 or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>. These materials are incorporated as they exist on the date of the approval and a notice of any change in these materials will be published in the Federal Register.

\* \* \* \* \*

(j) Effective in the 2012 and 2013 model years, NCPs will be available for the following emission standard:

(1) Diesel heavy-duty engine oxides of nitrogen standard of 0.20 grams per brake horsepower-hour in §86.007–11(a)(1)(i).

(i) [Reserved].

(ii) For heavy heavy-duty diesel engines:

(A) The following values shall be used to calculate an NCP in accordance with §86.1113–87(a):

( 1 ) COC50: \$1,561.

( 2 ) COC90: \$1,919.

( 3 ) MC50: \$5,203 per gram per brake horsepower-hour NO<sub>x</sub>.

( 4 ) F: 1.23.

( 5 ) UL: 0.50 grams per brake horsepower-hour NO<sub>x</sub>.

(B) The following factor shall be used to calculate the engineering and development component of the NCP for the standard set forth in §86.007–11(a)(1)(i) in accordance with §86.1113–87(h): 0.004.

(2) Manufacturers may not generate emission credits for any pollutant from engines for which the manufacturer pays an NCP.

(3) The penalty shall be adjusted annually as specified in §86.1113-87 with 2012 as the first year. Note that this means  $AAF_{2012}$  is equal to 1.

[FR Doc. 2012-1937 Filed 01/30/2012 at 8:45 am; Publication Date: 01/31/2012]